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RESILIENCE REQUIREMENTS IN
THE EMERGING KNOWLEDGE REGION –
THE CASE OF CITIES AND ENTERPRISES
IN THE SILESIAN CONURBATION

Introduction

The concept of *knowledge regions* (or *learning regions*) has become a wholly constructed model taking into account various dimensions. Reliable research on *learning regions* should take into account many aspects connected with human capital, the functioning of companies and institutions and also cultural specificity. The concept of resilience is one of these ideas that should be taken into account while talking about building the *knowledge regions*. *Learning regions* requires resilience and it appears as a result of cooperation between different actors and strategic planning. Having these abilities of cities and whole region it has a competitive advantage. The concept of resilience is associated primarily with the economic approach and concerns the capacity to solve the local economic problems in a way that it is the key to success. Analyzing this issue on the border on the border of economy and sociology, it is worth paying attention to these phenomena with a social background. A sequence of multiple processes depends on the state and the course of these phenomena. For these events we can include cooperation between main regional actors, their mutual adjustment and activities assessment, also the ability to set strategic goals, both by companies and local authorities. In the case of dynamic changes, that occur in industrial regions, where economic structure is changing, and the region becomes a region of knowledge – the ability to adapt to new conditions is particularly important.

The concept of resilience was described mostly in the context of preparedness to receive various types of unexpected events and react by increasing resistance and achieving economic stability. It was due to noticing some relationship between as the city cope with problems such as poverty, migration, pollution, natural disasters, economic crisis, the collapse of main sectors of the economy (Simme, Martin, 2009). Urban resilience is not only connected with response to a disaster or unexpected event, but also the ability to adjust in the face of uncertainty. According to Foster considerations, we can define resilience as an ability of a city to anticipate, prepare for, respond to and recover from a disturbance (Foster, 2007).

1. The aim of the article and methodology of research

Considerations on urban economic resilience should be conducted in a wider context of regional development, especially when we talk about old industrial regions. The purpose of this paper is to analyze the resilience capacity of

the Silesian conurbation. It is very interesting area that consists of many cities with close cultural, social and economic connections. The region is highly industrialized and it is still in the process of intensive changes, which is a result of collapsing of the dominant traditional industries. The analysis is going to be based on regional documents and research – mainly – interviews with key regional actors representing local authorities, experts like representatives of business support – and the company of three sectors of the economy. The qualitative method used in research made it possible to develop categories of response reflecting the most important trends in the relationship between the main regional actors. It also allowed to describe the ability to set the strategic objectives both by businesses and local authorities. This qualitative method and interview technique gave all respondents a free hand in their responses. The main technique for collecting data were in-depth interviews among intentionally chosen respondents. The territorial scope of study included Silesia, taking into account its subregions: central, north, south and west. There was conducted a total number of 100 interviews, 25 in each subregion. For the purposes of present description will be selected responses, that concern directly to the central part of the province – the Silesian conurbation.

The fundamental question of analysis therefore relates to requirements placed before the industrial regions, which gradually transform into regions of knowledge. Characteristics of these requirements will be developed on the base of positive examples of local government and regional enterprises, that maintain a stable economic and social position. Article presents main conclusions of research concerning regional cooperation between most important actors – its directions, barriers and opportunities especially in building knowledge region. Main difference between questions directed to entrepreneurs, experts and decision makers concerned their way of defining innovations and conducting or supporting this kind of process. The most interesting issues in that research have concerned opinion of entrepreneurs – their attitude to human capital, and knowledge transfer, applying innovations, cooperation between all actors. The second part of article will discuss examples of cities and enterprises (foreign corporation, a state enterprise, and with 100% private Polish capital), which can adapt to the external conditions and maintain their stable position in the region.

2. Regional cooperation – main directions, barriers, and opportunities

One of the main directions of cooperation mentioned by respondents, is the nearest surroundings – especially the local community and local authorities.

Building good relationships is essential to maintain a high level of trust. It is necessary in a situation threatening the stability. Companies from the central subregion, depending on the sector, to varying degrees, were engaged in relations with the community. It must be admitted, that sincerity of purpose was more convincing in other subregions, in the smaller towns of the region. In the conurbation there are many large companies and foreign corporations. Few of them have a policy of responsible business, intentionally setting their goals focused mainly on creating the image. This action is more planned, compatible with the general philosophy of the company's headquarters, often more independent of the pressure coming from this community.

In the case of the mining sector, entrepreneurs tend to be strongly rooted in the community. This is expressed through participation in local traditions, in activities related to a particular place – mine, settlement or parish. Claims attitude of the local community and the mine workers does not help to provide the appropriate relationships. This is one of barriers of development. In the central part of the region strong relationships with the local mines are very characteristic. It is followed by the Silesian tradition of mining, in which mines can not be separated from their social environment. This commitment takes the form of miners free time organizing, mining families support in difficult situations, and finally, environmental responsibility and ecological environment of the mine. These types of enterprises are particularly exposed to unexpected events especially of tragic final. The mine, usually part of a large mining company, takes care of the nearest surroundings connected with the area under which mining is carried out. However the entire company conducts its policy in the wider area, often covering the entire province of Silesia. A strong relationship with the region, rootedness in the region and awareness of social responsibility – are reasons for engagement at regional level through participation in important government bodies.

Most of the entrepreneurs of the industrial production sector implements policies directed in responsible business and has conducted campaigns for the stakeholders. However, these activities are rare and quite diverse, and initiatives have often employees derived from the nearest surroundings of the company. Most manufacturing companies are sensitive to the environmental consequences of their activities. It results from the EU requirements, and on the other hand from the desire to avoid conflicts with local communities. They try to build a positive image of business strategy, based on the symbiotic nature of relationships with the local community. Respondents underline, that companies are not lonely islands or enclaves separated from the environment. Maintaining good relationships with local municipal or county authorities, looking for close connections

between product and the local community – raise its appreciation in society. Some of the companies' activities are limited to financial support for local institutions or initiatives.

Entrepreneurs from service sector generally declared low level of financial commitment to the local community. It was proportionate to the size of the company. The lowest rates occurred in the involvement of companies, that were subsidiaries of international groups, providing standardized services in many areas of the globe, although some of them have adopted a policy of responsible business. Involvement was higher in indigenous firms, especially those providing specific services and adjusted to the local market. Weak business relationships with the local community in the Silesian conurbation may also result from the fact, that service companies often have branch character, or remain in a highly distributed dependence according to local authorities and densely populated society of the subregion. It happens, that some companies wish to deepen their relationship entering into a policy of social responsibility.

According to experts' opinion – the involvement of companies in relations with the community is apparent, provided it is calculated in future financial profits or it is associated with long-term policy of building the reputation of the company. Experts support the view, that foreign companies do not care properly for a good relationship with the local government and NGOs. According to the decision makers opinion, there is a stronger attachment to the community on the side of domestic firms. They have noticed, that there were more and more references to the local community in applications for EU funds. Respondents argued, that companies began to recognize the need and legitimacy to engage in their social environment.

Cooperation with the local community is the most common direction of business activity. As the research shows another type of contacts – for example with the authorities of higher level, institutions supporting the development of the region, and scientific institutions – are at moderate level. Good relationships are rather superficial. Entrepreneurs looked for reasons of low level of collaboration and usually indicated the lack of competence of local administration. In the research sector – it was primarily hierarchical distance very characteristic for the world of science.

Cooperation with higher level authorities concerns mainly larger companies, who feel responsible for the ecological impact of their activities. They try to be active in this regard, and simply care about their own image. It was pointed by some of experts – representatives of business support institutions – entrepreneurs emphasize economic calculation. Entrepreneurs, engaging in contacts with the local authorities, provide not only a good reputation in the community, but

also solve some of their business problems such as building roads, lower taxes, participation in public procurement. However, at the higher level of authorities, these interests are not always so obvious. That is why the desire to get involved should have an economic – often long-term justification.

Taking into account learning region's development collaboration with the world of science is particularly important. In this case, this cooperation should be based on mutual understanding, planning and building a common reaction to the unexpected collapse of the market and unforeseen circumstances in which the rapid introduction of innovative production methods and application of new solutions may be the only solution of situation.

Entrepreneurs of the mining sector talked a lot about science and business cooperation assessing it as insufficient. It could not be stated that Silesian industrial companies do not maintain contacts with universities, however, these contacts are loose, occasional and quite superficial. Frequently, the most advanced form are training and internship opportunities for students. In the opinion of the respondents the most frequent examples of cooperation are fruitless and facade. Such opinions were quite common and included not only the central part of the province. The main criticism of the scientists – apart from the lack of language and parochial thinking – was an excessive love of hierarchy, creating knowledge on shelves, and a complete lack of market-oriented attitude. Entrepreneurs can also be prosecuted. Research shows that they feel self-sufficient and independent. They often stressed that they must rely on their own strength, and they also defended access to their technology. Some of them directly spoke about theft of *know-how*. They are afraid about it, so they have their own closely guarded laboratories. They do not trust business support institutions trying to liaise with the scientific side. A characteristic opinion of the entrepreneurs is the lack of transparency of business initiatives making on the crossroads of key partners: government, business, and science. They also underlined the lack of transparency in incubators and clusters functioning in collaboration with service users and lack of spectacular results of this cooperation.

There were also some questions about possibility of creating knowledge region in a wider area than the center of the region – for example the area including the Czech part of Silesia. There were no clear objections or enthusiasm for such an initiative. The main contacts are rather on the border areas and are associated more with business contacts, not science. The most enthusiastic about the submitted proposal were the representatives of business support institutions and regional policy makers. They pointed to the existing favorable conditions for creating such a region. It results from the presence of the A-4 motorway and other more convenient means of communication. They emphasized the impor-

tance of collaboration between technology parks, incubators and clusters in direction of creating transboundary automotive industry basin. Such a “top down” view on this type of region may be a strategic look at the development and preparation for further creating knowledge region. On the other hand, entrepreneurs have expressed fear about institutionalization of such a “solution”. In their opinion organizational structure and allocation of funds in this region could be the biggest problem. This form should mature for some time, and on this basis can be created similar and join them in the future. Only one respondent expressed the belief that this area of knowledge already exists, which is proved by inhabitants themselves, who had to learn how to adapt to new economic conditions. This project, however, seemed to be very abstract for respondents. They usually had a positive assessment together with various concerns about the form it could adopted in practice.

3. Case studies – resilient cities

Among strategies of cities ready for cooperation – which provides flexibility of whole Silesian conurbation – it is worth looking through documents from Gliwice, Katowice, and Tychy. This kind of analysis is based on looking for such an actions, that indicate for planning in terms of knowledge development in wider area and connections between cities.

The most important strategic document for Gliwice is “Strategy for Integrated and Sustainable Development of Gliwice by 2022”. Basing on the table of contents it can be concluded, that the city authorities have a clear concept of development, analyze the situation, carry out a diagnosis, have a vision for the city and on that base indicate priorities and strategic objectives. Authors of that document stress that “[...] vision is an anticipatory scenario, which means, that it expresses wishes and expectations concerning development of the city” (Strategy, 2007). Working on the vision it was taken into account a lot of levels of development such as the structure of the city, its cohesion, local development entities and their relationships, distinguishing features and advantages of the city, position and image of the city in the neighborhood. All these planes were described in detail. In the vision of the city of Gliwice it will become in 2022, inter alia, the national leader in implementing innovation economy. The development perspective therefore goes for national perspective. “A high level of innovation in the local economy will be possible thanks to:

- development of cooperation between science and business,
- attracting investment connected with modern technology,

- development of local, economic networks of cooperation enable to diffuse innovation,
- high level of residents technical competence” (Strategy, 2007).

References to the Silesian Agglomeration is common in the city vision. It reflects about wider perspective of decision makers and their awareness of connections in the region. Apart from the vision of the city, there have been designated five priorities:

- Construction of modern economic structures.
- Improving the quality of the city life.
- Development of metropolitan functions.
- Enhancing the attractiveness of urban space.
- Creating a civil society.

They are not mutually exclusive, and for each of them several strategic objectives were developed. They have been described in detail in the strategy. For each of them there is designated realization indicator. It convinces that the document is not facade action.

The development strategy of the city of Katowice “Katowice 2020” was established in late 2005. From initial information which includes a table of contents it can be concluded – as in the case of Gliwice – that the vision of the city has its justification in real diagnosis of the situation. Authorities analyze opportunities and threats, strengths and weaknesses of the city. The awareness of being a capital of the province and the center of Silesian conurbation go together with strategic plans. Therefore, authors of the paper emphasized, inter alia that “[...] the principle of partnership should be considered as a primary means of achieving synergistic effects of common using and developing endogenous potentials of the Silesian Agglomeration cities, which are potentials: the human and infrastructure” (Katowice 2020, 2005). Leading ideas of the vision, that have authorities of the city, are:

- “Katowice as a metropolis, in common actions together with central cities in the Silesian Agglomeration, particularly with Gliwice and Sosnowiec.
- Katowice as capital of twenty-first century in Upper Silesia, also as the national center for research and development in advanced technologies.
- Katowice as a center of Europolia in Central Europe including Kraków and Ostrava. Katowice as a business and financial center of the Silesian Agglomeration and the South of Poland” (Katowice 2020, 2005).

In the document, much attention was paid to development of innovations, research and development sector, and conditions of technology transfer. Katowice in the future has a chance to become a center of academic and scientific research in the field of advanced technologies, in areas such as biotechnology, in-

formation technology, mechatronics, electronics and nanotechnology. Katowice will be a place of establishment of R&D centers of domestic and international corporations and the place of effective cooperation between academic and business. The result of this cooperation will be transfer of technological, social, and organizational innovations. This is the place where develop a center of strong knowledge-based economy and concentration of enterprises form advanced technology industries. The city will also promote rapidly growing innovative small and medium enterprises which largely influence on restructured economic base of the city. No less important is the fact that Katowice was a community with enhanced competencies and entrepreneurial skills, and included a modern business infrastructure oriented for creating new companies and attracting investors. The document states, that Katowice has to become a modern city, and its development is mainly based on knowledge and innovations. These strategic objectives overlap with the vision of the central subregion of the Regional Development Strategy.

On the website of city council of Tychy, one can find a lot of strategic documents including: "Local Revitalization Program of the City of Tychy", "Social problem-solving strategy in Tychy (2008-2013)", "Development Strategy for the City of Tychy: Tychy 2013". There are also strategies for the development of sport, culture and education, as well as plan for revitalizing the "Paprocany" park in Tychy. In terms of time horizon, strategy of development of Tychy is the least-date, compared to two documents discussed above. The strategy describes key participants of the development, designates the vision, mission and development priorities for 2003-2013. The vision of Tychy future is organized around three key elements – "Entrepreneurship-Knowledge-Environment". They became basis for the formulation of three main priorities of the strategy:

- The development of entrepreneurship and competitiveness of the city.
- The development of information society and preventing social exclusion.
- The development of urban environmental infrastructure.

All specific activities agreed on these priorities are focused on local issues, reaching at most to using the benefits of the information society. Strategic projects of each priorities are focused mainly on solving local problems, such as labor market, education system, urban infrastructure and road communication. Also in the mission of the city there is no reference to values of supra-local and building them in a wider context, then the city one. The document shows Tychy as a city of small aspirations in the regional or national level. But it can not be prejudged about definitive criticism towards city authorities. Updating whole strategy will surely take place soon, and multiplicity and minuteness of other strategic documents of the city show a high level of decision makers awareness.

The most interesting seems to be the most recent document “Local Program of Revitalization City of Tychy”, where one can find references to the “Silesian Regional Development Strategy for the years 2000-2020” (Local Program, 2003). In the context of building resilience in the knowledge region, it could be appropriate to have one most important document, which would show the unity of plans and awareness of regional networks.

4. Case studies – resilient enterprises

Resilience and readiness to face necessary changes in the process of building knowledge region concerns also companies and their strategic approach to development, including changes, that occur in the environment. Research discussed above also focused on issues related to strategic planning and business development. Among the 60 surveyed companies, there can be found examples, that very rationally analyze dimensions of their activities by focusing not only on economic aspects or short-term activities.

An interesting example was Johnson Controls Company. This large, international company is a global leader in diversified technology and industry. Its products and services are offered in over 150 countries. In Silesia region they mainly focus on the automotive industry, because of the numerous connections with other corporations such as Fiat and General Motors. The company is guided by values, that respondents mentioned in the first introductory sentences concerning the management and strategic planning. As he pointed out – these values have strengthen organization and have shaped organizational culture. They form basis for a ten-year plan (10-Year Marker), which is a set of strategic guidelines to achieve long term success. They most important values are: honesty, customer satisfaction, employee involvement, innovation, sustainable development. These values will both serve to build a good relationship with the environment, and development of the company. Honesty is manifested, inter alia, in respecting safety rules. In 2011, Johnson Controls International Ltd. located in Bieruń was awarded as “Employer-organizer of safe work”. Equally important value is customer satisfaction. Employees serve with specialized knowledge and practical solutions. This approach – based on honesty – is going to strengthen relations between people from different business units and fulfilling different functions. The source of success and resilience to unforeseen situations, seems to be employees, whose development is under constant pressure. The company supports a culture, that promotes outstanding tasks, teamwork, turning to all employees. Employees are trained to act in the global market. Extremely important value are innovations. Company managers are aware, that it is always possible to devise a better way of action.

Therefore, they are always looking for commercialization opportunities for innovation around the world. It whole is accompanied by an idea of sustainable development, associated with promotion of effective use of resources, and community involvement for the environment and local community. The company activities have a global dimension, but also include activity for local community, education, environment, social welfare and development of leadership skills. Respondent gave several examples, that demonstrate engagement of the company. One of the most interesting project is the Blue Sky Involve – a program that encourages employees to create groups of volunteers working with local organizations to support projects related to environmental protection and development of leadership skills. Every year, number of employees providing in this way is growing. It is also a manifestation of growth of civil activity. The company stressed, that it builds a new generation.

Another interesting example of a company planning its long term development is the Famur Group – a leading manufacturer of machinery for mining. In 2011, the company took first place as “Most Dynamic Company” in Silesian province among large companies. Ranking list has been prepared by the Financial Paper and business intelligence Soliditet, belonging to the Group Bisnode. The list included 106 companies from the region of Silesia with a turnover exceeding PLN 200 millions and employing over 250 people. The priority of the Famur Group is to build effective, innovative company, flexibly responsive to customer needs. For this purpose Famur strategy focuses on the segment of machinery and equipment for mining industry. Automated longwall systems are designed to operate even in the most difficult mining and geological conditions. Delivery of a wide range of machines used in underground mining and surface mining is the core of company business. The authorities of Famur Group emphasize concern about innovative products, technology for their preparation and constant investments in research and development. The real expression of engagement to R&D activities is setting up their own laboratory – Famur Institute Sp. of o.o. (Formerly the Polish Centre for Mining Technology Sp.). It focuses on conducting research and development for the Famur Group. As an independent entity, it specializes exclusively on research and development using their potential as fully as possible and direct it to the activities typical for academic units (the Company has status of Research and Development Center). It supports development of innovative solutions and high specialization in the field of scientific research. Another area of Famur Group activity is an agreement signed by the company and the Silesian Technical University, which aimed to promote education and career development of young people and undertaking research and scientific work. As a result of this cooperation University employees will be able

to conduct surveys, analyzes and opinions in the field of technology, organization, and management. Common reaching out for funding will be also important, including grants from the EU. It will allowed effective and collaborative partnership. Representatives of the board emphasized, that the company focuses on innovations and will gladly share their knowledge.

Through all the year there are paid internships for ambitious students, who want to gain their first professional experience in the mining machinery industry. The whole initiative is addressed to technical students particularly in departments: electrical, mechanical – technology, mining and mechanical engineering. Internships last for four months and take place under the guidance of mentors, who are employees selected from company. Their job is to transfer knowledge and long-term experience for young, inexperienced trainees. Mentors shall ensure, that trainees have achieved the greatest benefit from the practical application of their skills and abilities in the assigned programs. Apart from establishment of their own research institute, cooperation with the Silesian Technical University, paid internships for students – the company has received support from the European Union under the Operational Program 4.4 and 1.4-4.1 Innovative Economy. Thanks to this, the company built one of the most modern factory in mining machinery sector in Poland. Company's impact on the development of knowledge region is undeniable, and financial results confirm growing scale and dynamics of the business.

Another company coverage includes not only the Silesian conurbation, but the entire province. Kompania Węglowa S.A. is probably the largest mining concern in Europe – employing 60 000 workers. Company management – although heavily dependent on state authorities – for years put stress on key competencies, based on innovation. For this purpose, they carried out cooperation with scientific institutions, local governments and economies. This activity is quite extensive due to the large area and number of employees. As a company associated with mining industry and damages arose as a result of extraction – authorities emphasize, that their priorities are environmental protection and worker safety. They feel responsible for the region and aware of creating thousands of jobs. Social security for inhabitants of Upper Silesia, the impact on regional culture and cultivating of mining tradition – are also important. It is worth to describe just two examples of actions demonstrating how that company takes into account conditions of their work. The first example concerns the situation of restructuring the mining industry, which resulted from linking mines. Since 1997, part of staff was encouraged to move away from mining.

The rest of workers from closure mines has been redirected to other mines, what had met with resistance. Transitions to other mines were connected with

breaking traditional ties, which were highly appreciated values. Traditional steam hook played a special role, because everyone there has their own place and the same neighbors. Emerging attachment was due to the fact, that employees working underground do not work in one place. They moved around as they move to the next board or areas. Steam – and that own hook – were the only secure place in the company. As a result of analysis conducted by the company it turned out, that the process of change should start by creating a new place reflecting conditions from the previous bath mine. This very subtle sense of vulnerability of employees was due to the openness of the leadership, readiness for an innovative approach to traditional culture and, above all, respect for employees. The ability to anticipate situations negatively affecting on the firm and rapid response turn out in this case the best choice. Similarly, in another example of actions that Kompania Węglowa has taken – this time in the field of environmental protection. Coal mining is associated with many nuisance to the environment – including creation of dumps or mining landfill. Carbon present in these wastes is prone to spontaneous combustion, which is a frequent cause of spontaneous fires. The landfill “Skalny” as the result of “Boleslaw Śmiały” mine activities in Łaziska Górne burned repeatedly. However, in the late 90's mine was threatened with closure, and there was a real danger of losing 2500 jobs. In 2000-2004 management of the mine with the support of the company, based on partly organized project, has taken on to extinguish the fire with their own forces and restoring “Skalny”. They reached full effect. This happened as a result of exemplary business cooperation with many partners in the region. Numerous penalties were written off in the total amount of approximately PLN 480 millions. The entire process of extinguishing landfills engaged doctoral students and diplomats of several universities (technical, agricultural and other). It allowed to develop effective and affordable solutions. During these activities two patents had developed. Besides of the relations with the scientific world, particular care was put on regular contacts with all identified stakeholders (residents, local authorities, government, media). They were informed in a reliable way about intentions, conditions and progress of the work. This example of landfill liquidation indicates to thoughtful action and openness of the company and also its ability to flexible respond to challenges combining knowledge with social conscience.

Conclusions

The concept of resilience has its sociological dimension, which covers mainly the quality of relationship between main actors in the region. Taking into account regional development, and particularly construction of knowledge re-

gion – readiness of regional authorities and key companies to unexpected market situations, should primarily be included. The best evidence of this are: strategic planning, focusing on changes and opinion about the quality of collaboration between key partners. From a sociological point of view, it is worth to analyze phenomenon of flexibility and resilience of cities and regions with possible shocks. Analysis described above includes a reference to research concerning changes in the industrial region. These considerations also took into account urban strategies and assumptions for important companies. It follows a number of important conclusions.

From studies on changes in the industrial region concludes, that the best relationships are maintained at the local level. It concerns mainly large employers – both private and public, also small businesses associated with the nearest neighborhood. Large companies have often a policy of socially responsible business. They are involved in local events, that enhance the positive image. Companies from different sectors represent different levels of readiness for changes. It results from specificity of industry, different development plans, diversity of business and maintained contacts. Mining business are closely related to regional industrial tradition. Being aware of the specific industry, they are better prepared for unexpected economic events. Accidents at work causing death are completely unexpected critical events and it incomparable with economic shocks, because they are usually relatively slow process. In that particular case, preparation for this type of dramatic events must be at the highest level. Entire attention of managers focus on that. In the context of building knowledge region, there are developed multifaceted contacts, leading to the main goal – safe production. On the other hand, being aware of significance of their role, companies try to take care about social aspects of functioning in the region. This is closely connected with continuous improvement of knowledge of workers and applying it to conduct a social change within the company. Production companies pay attention to environmental aspects of their business. It is one of the potential risks – apart from major market changes. Preparations for possible environmental hazards have appeared in establishing good relations mainly with the community and local authorities. Scientific cooperation, which could potentially improve the quality of production – is sporadic. In the case of the Silesian service companies, their involvement in local issues depends on specificity of business and ownership structures. More involved were indigenous companies, providing specific service and tailored to the local market. Part of foreign service companies have implemented socially responsible strategies, and some of them did not get involved in regional affairs.

Regional experts and decision makers accordingly assess, that entrepreneurs recognized a necessity to engage in deeper relationships for regional development. It is connected primarily with a view of future actions of the company. Scientific cooperation, however, is still not a priority for most of businesses. From the perspective of development of knowledge region only the first relationship are built. The knowledge transmitted in that process is not necessarily scientific.

Analysis of strategies of selected cities showed extensive ambitions of their authorities. Expressed expectations about the growth included aspects connected with construction of knowledge region. Both Katowice and Gliwice based their development on innovation and knowledge capital of universities located in these cities. There can be found direct reference to the implementation of innovation and knowledge-based economy. However, references to cooperation between cities in the region, are not very frequent, and – taking into account readiness for possible different types of crises – it is not exposed in the strategic plans. An example of this is also a strategy of Tychy, which is not too extensive and focuses mainly on internal affairs of the city. Main reflection, which results from analyzes of individual cities documents, concern a fundamental focus on local issues without cooperation, as leading element of the development.

Analysis of enterprises readiness to development of knowledge region within its own structures had brought positive findings. Each company – both foreign company, Polish state company, and also private – realizes its own strategy, which takes into account creating of forward-looking relationship with local community, government and key institutions in the region. However, residual and shallow scientific cooperation is main obstacle for full readiness to potential market crises. In fact, only capital of knowledge is being built. Staff are extensively trained and their skills are continually improved and refined. It gives the conviction, that in situation of crisis their knowledge will be properly used.

It is impossible to fully predict crises. The concept of resilience in sociological terms, taking into account development of knowledge region, points to important aspects of maintaining good relations. This is necessary to deepen their knowledge and build readiness for the market collapse. Industrial region – such as Silesia – which is on the way to knowledge region – is in a unique situation, because it is exposed to shocks, that may have considerable social importance. The process of building resilience to unforeseen situations must take into account a common strategic approach of many regional partners being aware of common interests. At that moment this awareness is slowly, but steadily growing.

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